AMENDMENTS TO THE CLAIMS

Claims 1-40 (Cancelled)

Claim 41 (New) A method of using an information processing apparatus for processing data related to a table format of a table having at least one of rows and columns separated by a ruled line, the information processing apparatus including (i) a means to generate and store table format data that represents the table format, the table format data including (a) character string data specifying a code string and a position of a character string or a symbol on the table format, (b) line data specifying a category and a position of a line on the table format, one category of the line being the ruled line, and (c) cell data specifying a boundary position of a cell of a plurality of cells, each of the plurality of cells being a rectangular area surrounded by ruled lines on the table format, (ii) a means to designate each set of a plurality of sets of cells, of the plurality of cells, as a respective data field and to associate a corresponding item name with each respective data field of the designated data fields, such that each of a plurality of corresponding item names is associated with a respective data field, wherein the designated data fields comprise a plurality of data fields, (iii) a means to relate a difference condition character string to a first data field of the plurality of data fields, the difference condition character string representing a difference condition that is a difference in a method of outputting data between two unitary areas specified in the first data field, and each of the two unitary areas being a rectangular area in which one datum is entered, (iv) a means to display the table format based on the table format data, and (v) a means to store a data file containing a plurality of file records, each of the plurality of file records being a set of a datum, wherein each respective constituent datum of each of the plurality of file records is associated with a proper item name, the method comprising:

(1) specifying, for each respective data field of the plurality of data fields, item definition data that relates a corresponding item name, of the plurality of corresponding item names, to the respective data field, of the plurality of data fields, such that the first data field, of the plurality of data fields, is associated with a first item name of the plurality of corresponding item names, wherein each other data field, of the plurality of data fields, is disposed to the left of or above the first data field on the table format;

(2) specifying difference condition definition data for the first data field, the difference condition definition data being specified based on the difference condition character string related to the first data field, the difference condition definition data defining the difference condition and including information of data changing and information of the item name registered therein, such that a datum is to be changed according to the information of data changing, and the datum to be changed is associated with the item name registered as the information of item name;

(3) identifying a set of cells, of the plurality of cells, as a relational cell set based on the cell data identified in the item definition data specified for each respective data field, wherein each constituent cell of the relational cell set is respectively identified in a data field, of the plurality of data fields, having a proper item name associated therewith, such that a first constituent cell of the relational cell set is identified in the first data field, such that the first constituent cell is located on a target column and on a target row of the table format, and such that each other constituent cell of the constituent cells of the relational cell set is located on only one of the target column and the target row;

(4) identifying a first unitary area and a second unitary area in relation to the first constituent cell of the relational cell set in the first data field, wherein a rectangular area obtained

by uniting the first unitary area and the second unitary area occupies a vertical range and a horizontal range, such that each respective constituent cell of the relational cell set other than the first constituent cell fully occupies only one of the vertical range and the horizontal range, and such that the first unitary area and the second unitary area are identified by a predetermined method based on cell data representing the first constituent cell of the relational cell set;

(5) specifying a main record that is a combination of each respective constituent datum associated with the proper item name, each respective constituent datum of the main record being identified as a datum entered in each respective constituent cell of the relational cell set, and the proper item name associated with each respective constituent datum of the main record being identified as an item name associated with a data field, of the plurality of data fields, containing a corresponding constituent cell of the relational cell set;

(6) specifying a sub-record by changing a constituent datum of each respective constituent datum of the main record according to the information of data changing included in the difference condition definition data, and the changed constituent datum being associated with the item name registered as the information of the item name included in the difference condition definition data;

(7) outputting a constituent datum of a first file record fetched out from the data file into the identified first unitary area, the output constituent datum of the first file record being associated with the first item name in the first file record, wherein each constituent datum of the main record and associated with an item name other than the first item name, is the same as a constituent datum (i) of the first file record and (ii) sharing a same associated item name; and

(8) outputting a constituent datum of a second file record fetched out from the data file into the identified second unitary area, the output constituent datum of the second file record

being associated with the first item name in the second file record, wherein each constituent datum of the sub-record and associated with an item name other than the first item name, is the same as a constituent datum (i) of the second file record and (ii) sharing a same associated item name.

Claim 42 (New) The method of claim 41, wherein the first unitary area and the second unitary area is identified by dividing the first constituent cell of the relational cell set based on specified symbols or a specified line entered at the specified position in the first constituent cell.

Claim 43 (New) The method of claim 41, wherein the sub-record is obtained by replacing a corresponding constituent datum of the main record with a datum registered as the information of data changing in the difference condition definition data, the corresponding constituent datum of the main record being associated with an item name registered as the information of the item name in the difference condition definition data.

Claim 44 (New) The method of claim 41, wherein a datum is output into the second unitary area, the datum output into the second unitary area representing a numerical value that is a sum of each numerical value represented by a constituent datum of each file record of a sub-set of file records of the plurality of file records, the datum output into the second unitary area being associated with the first item name, the first item name being designated as tabulation category, wherein each constituent datum of the sub-record and associated with an item name other than the first item name, is the same as a constituent datum (i) of each file record of the plurality of file records and (ii) sharing a same associated item name.

Claim 45 (New) An information processing apparatus for processing data related to a table format of a table having at least one of rows and columns separated by a ruled line, the information processing apparatus comprising:

a means to generate and store table format data that represents the table format, the table format data including (a) character string data specifying a code string and a position of a character string or a symbol on the table format, (b) line data specifying a category and a position of a line on the table format, one category of the line being the ruled line, and (c) cell data specifying a boundary position of a cell of a plurality of cells, each of the plurality of cells being a rectangular area surrounded by ruled lines on the table format;

a means to designate each set of a plurality of sets of cells, of the plurality of cells, as a respective data field and to associate a corresponding item name with each respective data field of the designated data fields, such that each of a plurality of corresponding item names is associated with a respective data field, wherein the designated data fields comprise a plurality of data fields;

a means to relate a difference condition character string to a first data field of the plurality of data fields, the difference condition character string representing a difference condition that is a difference in a method of outputting data between two unitary areas specified in the first data field, and each of the two unitary areas being a rectangular area in which one datum is entered;

a means to display the table format based on the table format data;

a means to store a data file containing a plurality of file records, each of the plurality of file records being a set of a datum, wherein each respective constituent datum of each of the plurality of file records is associated with a proper item name;

a means for specifying, for each respective data field of the plurality of data fields, item definition data that relates a corresponding item name, of the plurality of corresponding item names, to the respective data field, of the plurality of data fields, such that the first data field, of the plurality of data fields, is associated with a first item name of the plurality of corresponding item names, wherein each other data field, of the plurality of data fields, is disposed to the left of or above the first data field on the table format;

a means for specifying difference condition definition data for the first data field, the difference condition definition data being specified based on the difference condition character string related to the first data field, the difference condition definition data defining the difference condition and including information of data changing and information of the item name registered therein, such that a datum is to be changed according to the information of data changing, and the datum to be changed is associated with the item name registered as the information of item name;

a means for identifying a set of cells, of he plurality of cells, as a relational cell set based on the cell data identified in the item definition data specified for each respective data field, wherein each constituent cell of the relational cell set is respectively identified in a data field, of the plurality of data fields, having a proper item name associated therewith, such that a first constituent cell of the relational cell set is identified in the first data field, such that the first constituent cell is located on a target column and on a target row of the table format, and such that each other constituent cell of the constituent cells of the relational cell set is located on only one of the target column and the target row;

a means for identifying a first unitary area and a second unitary area in relation to the first constituent cell of the relational cell set in the first data field, wherein a rectangular area obtained

by uniting the first unitary area and the second unitary area occupies a vertical range and a horizontal range, such that each respective constituent cell of the relational cell set other than the first constituent cell fully occupies only one of the vertical range and the horizontal range, and such that the first unitary area and the second unitary area are identified by a predetermined method based on cell data representing the first constituent cell of the relational cell set;

a means for specifying a main record that is a combination of each respective constituent datum associated with the proper item name, each respective constituent datum of the main record being identified as a datum entered in each respective constituent cell of the relational cell set, and the proper item name associated with each respective constituent datum of the main record being identified as an item name associated with a data field, of the plurality of data fields, containing a corresponding constituent cell of the relational cell set;

a means for specifying a sub-record by changing a constituent datum of each respective constituent datum of the main record according to the information of data changing included in the difference condition definition data, and the changed constituent datum being associated with the item name registered as the information of the item name included in the difference condition definition data;

a means for outputting a constituent datum of a first file record fetched out from the data file into the identified first unitary area, the output constituent datum of the first file record being associated with the first item name in the first file record, wherein each constituent datum of the main record and associated with an item name other than the first item name, is the same as a constituent datum (i) of the first file record and (ii) sharing a same associated item name; and

a means for outputting a constituent datum of a second file record fetched out from the data file into the identified second unitary area, the output constituent datum of the second file

record being associated with the first item name in the second file record, wherein each constituent datum of the sub-record and associated with an item name other than the first item name, is the same as a constituent datum (i) of the second file record and (ii) sharing a same associated item name.

Claim 46 (New) A non-transitory computer-readable recording medium having a computer program recorded thereon, the program being for controlling an information processing apparatus to process data related to a table format of a table having at least one of rows and columns separated by a ruled line, the information processing apparatus including (i) a means to generate and store table format data that represents the table format, the table format data including (a) character string data specifying a code string and a position of a character string or a symbol on the table format, (b) line data specifying a category and a position of a line on the table format, one category of the line being the ruled line, and (c) cell data specifying a boundary position of a cell of a plurality of cells, each of the plurality of cells being a rectangular area surrounded by ruled lines on the table format, (ii) a means to designate each set of a plurality of sets of cells, of the plurality of cells, as a respective data field and to associate a corresponding item name with each respective data field of the designated data fields, such that each of a plurality of corresponding item names is associated with a respective data field, wherein the designated data fields comprise a plurality of data fields, (iii) a means to relate a difference condition character string to a first data field of the plurality of data fields, the difference condition character string representing a difference condition that is a difference in a method of outputting data between two unitary areas specified in the first data field, and each of the two unitary areas being a rectangular area in which one datum is entered, (iv) a means to display the

table format based on the table format data, and (v) a means to store a data file containing a plurality of file records, each of the plurality of file records being a set of a datum, wherein each respective constituent datum of each of the plurality of file records is associated with a proper item name, the program causing the information processing apparatus to execute a method comprising:

(1) specifying, for each respective data field of the plurality of data fields, item definition data that relates a corresponding item name, of the plurality of corresponding item names, to the respective data field, of the plurality of data fields, such that the first data field, of the plurality of data fields, is associated with a first item name of the plurality of corresponding item names, wherein each other data field, of the plurality of data fields is disposed to the left of or above the first data field on the table format;

(2) specifying difference condition definition data for the first data field, the difference condition definition data being specified based on the difference condition character string related to the first data field, the difference condition definition data defining the difference condition and including information of data changing and information of the item name registered therein, such that a datum is to be changed according to the information of data changing, and the datum to be changed is associated with the item name registered as the information of item name;

(3) identifying a set of cells, of the plurality of cells, as a relational cell set based on the cell data identified in the item definition data specified for each respective data field, wherein each constituent cell of the relational cell set is respectively identified in a data field, of the plurality of data fields, having a proper item name associated therewith, such that a first constituent cell of the relational cell set is identified in the first data field, such that the first

constituent cell is located on a target column and on a target row of the table format, and such that each other constituent cell of the constituent cells of the relational cell set is located on only one of the target column and the target row;

(4) identifying a first unitary area and a second unitary area in relation to the first constituent cell of the relational cell set in the first data field, wherein a rectangular area obtained by uniting the first unitary area and the second unitary area occupies a vertical range and a horizontal range, such that each respective constituent cell of the relational cell set other than the first constituent cell fully occupies only one of the vertical range and the horizontal range, and such that the first unitary area and the second unitary area are identified by a predetermined method based on cell data representing the first constituent cell of the relational cell set;

(5) specifying a main record that is a combination of each respective constituent datum associated with the proper item name, each respective constituent datum of the main record being identified as a datum entered in each respective constituent cell of the relational cell set, and the proper item name associated with each respective constituent datum of the main record being identified as an item name associated with a data field, of the plurality of data fields, containing a corresponding constituent cell of the relational cell set;

(6) specifying a sub-record by changing a constituent datum of each respective constituent datum of the main record according to the information of data changing included in the difference condition definition data, and the changed constituent datum being associated with the item name registered as the information of the item name included in the difference condition definition data;

(7) outputting a constituent datum of a first file record fetched out from the data file into the identified first unitary area, the output constituent datum of the first file record being

associated with the first item name in the first file record, wherein each constituent datum of the main record and associated with an item name other than the first item name, is the same as a constituent datum (i) of the first file record and (ii) sharing a same associated item name; and

(8) outputting a constituent datum of a second file record fetched out from the data file into the identified second unitary area, the output constituent datum of the second file record being associated with the first item name in the second file record, wherein each constituent datum of the sub-record and associated with an item name other than the first item name, is the same as a constituent datum (i) of the second file record and (ii) sharing a same associated item name.